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Application No. 10/735,498

Group Art Unit 2811

Substitute Disclosure Form (PTO-1449)

	Modified) Com PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 16459-013001
	information Dis	Applicant Alexei A. Erchak	
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	U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate	
WSZ	AA	5,132,751	July 21, 1992	Shibata, et al.				
	ΑB							
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	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Publication Country or		Country or		lation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	AL						j 	
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	AN							
	AO							
	AP							

	Other Documents (include Author, Title, Date, and Place of Publication)						
Examiner Initial	Desig. ID	Document					
WIL	AQ	A. Köck et al., "Novel surface emitting GaAs/AlGaAs laser diodes based on surface mode emission," Appl. Phys. Lett. 63 (9), 30 August 1993, pages 1164-1166					
WSZ	AR	A. Köck et al., "Strongly directional emission from AlGaAs/GaAs light-emitting diodes," Appl. Phys. Lett. 57 (22), 26 November 1990, pages 2327-2329					
	AS						
	AT						

Examiner Signature .	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if no	t in conformance and not considered. Include copy of this form with
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U.S. Department of Commerce Patent and Trademark Office

Attorney's Docket No. 16459-013001

Application No. 10/735,498

Information Disclosure Statement by Applicant (Use several sheets if necessary)

Applicant Alexei A. Erchak

Filing Date December 12, 2003 Group Art Unit 2811

(37 CFR §1.98(b))

		·	U.S. Patent	Documents			
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
WSL	AA	5,126,231	June 30, 1992	Levy			
1	AB	6,778,746	August 17, 2004	Charlton, et al.			
	AC	6,742,907	June 1, 2004	Funamoto, et al.			
	AD	2004/0110856	June 10, 2004	Young, Jung Gun et al.			
	AE	2004/0144985	July 29, 2004	Zhang, Zhibo, et al.			
	AF	2004/0207310	October 21, 2004	Erchak et al.			
	AG	2004/0207319	October 21, 2004	Erchak et al.			
	AH	2004/0207323	October 21, 2004	Erchak et al.			
	ΑI	2004-0206962	October 21, 2004	Erchak et al.			
	AJ	2004-0206971	October 21, 2004	Erchak et al.			
	AK	2004-0207320	October 21, 2004	Erchak			
	AL	2004-0259279	December 23, 2004	Erchak et al.			
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	AN	2005/0051785	March 10, 2005	Erchak et al.			
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	AP	2005/0087757	April 28, 2005	Erchak et al.			
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	AU	3,293,513	August 8, 1962	J.R. Biard et al.			
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	AW	4,864,370	September 5, 1989	Gaw et al.			
	AX	5,126,231	June 30, 1992	Levy			
1	AY	6,071,795	06/06/00	Cheung et al.			
V	AZ	6,778,746	August 17, 2004	Charlton, et al.			

Examiner Signature	Date Considered Co/s/os
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	Substitute Disclosure Form (PTO-1449)

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 16459-013001	Application No. 10/735,498		
1	closure Statement	Applicant Alexei A. Erchak			
	neets if necessary)	Filing Date December 12, 2003	Group Art Unit 2811		

	U.S. Patent Documents						
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
U4L	AAA	6,849,558	February 1, 2005	Schaper			
	ABB	6,307,218	October 23, 2001	Steigerwald et al.			
V	ACC	5,600,483	February, 1997	Fan et al.			

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Examiner	Desig.	Document	Publication	Country or			Translation	
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	ADD							
	AEE							
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	AGG							
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	Other Documents (include Author, Title, Date, and Place of Publication)						
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	AKK						
	ALL						

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	Substitute Disclosure Form (PTO-1449)

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U.S. Department of Commerce Patent and Trademark Office

Attorney's Docket No. 16459-013001

Application No. 10/735,498

Information Disclosure Statement by Applicant (Use several sheets if necessary)

Applicant Alexei A. Erchak

Filing Date

**Group Art Unit** 

(37 CFR §1.98(b))

December 12, 2003

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			U.S. Pate	nt Documents			
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
WSL	AA	6,831,302	12/14/04	Erchack et al.			
ì	AB	6,504,180	1/7/03	Heremans, et al.			
	AC	6,690,268	2/10,/04	Schofield, et al.			
	AD	6,642,618	11/4/03	Yagi, et al.			
	AE	6,784,027	8/31/04	Streubel, et al.			
	AF	6,847,057	1/25/05	Gardner, et al.			
	AG	6,072,628	6/6/00	Sarayeddine			
	AH	6,122,103	9/19/00	Perkins, et al.			
	ΑĬ	6,288,840	9/11/01	Perkins, et al.			<u></u>
	AJ	6,574,383	6/3/03	Erchak, et al.			
	AK	6,504,180	1/7/03	Heremans, et al.			
	AL	6,690,268	2/10/04	Schofield, et al.			
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	AQ	6,303,405	10/16/01	Yoshida, et al.			
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	AV	6,465,808	10/15/02	Lin			
	AW	2003-0143772	7/31/03	Chen, Tzer-Perng		•	
	AX	6,762,069	7/13/04	Huang, et al.			
	AY	6,649,437	11/18/03	Yang, et al.			
/	AZ	6,740,906	5/25/04	Slater, Jr., et al.			
V	AAA	6,791,119	9/14/04	Slater, Jr., et al.			

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Disclosure Form (PTO-1449)

Substitute Form PTO-1449 (Modified)	· · · · · · · · · · · · · · · · · · ·		Application No. 10/735,498	
	closure Statement	Applicant Alexei A. Erchak		
(Use several sheets if necessary)		Filing Date December 12, 2003	Group Art Unit 2811	

			U.S. Pate	ent Documents			
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
USL	ABB	6,794,684	9/21/04	Slater, Jr., et al.			
	ACC	6,825,502	11/30/04	Okazaki, et al.			
	ADD	2004-0182914	9/23/04	Venugopalan, Hari S.			
V	AEE	2005-0019971	1/27/05	Slater, David B. Jr.			

	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Country or			Translation	
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NEL	AFF	02/071450 A2		wo				
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	Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner Initial	Desig. ID	Document
USL	AKK	Wendt et al. "Nanofabrication of photonic lattice structures in GaAs/AlGaAs," J. Vac. Sci. Technol. B 11 (6), Nov/Dec 1993, pages 2637-2640
usl	ALL	Gourley et al. "Optical properties of two-dimensional photonic lattices fabricated as honeycomb nanostructures in compound semiconductors," Appl. Phys. Lett. 64 (6), 7 February 1994, pages 687-689
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Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if no next communication to applicant.	it in conformance and not considered. Include copy of this form with

Substitute Disclosure Form (PTO-1449)

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WEL	AA	5,834,331	November 10, 1998	Razeghi			·
	AB	6,426,515	July 30, 2002	Ishikawa			
	AC	2003/0222263	December 4, 2003	Choi			
V	AD	6,091,085	July 18, 2000	Lester			
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EXAMINER: Initials citation considered. Draw line through citation if no next communication to applicant.	t in conformance and not considered. Include copy of this form with
	Substitute Disclosure Form (PTO-1449)

Attorney's Docket No.: 16459-013001



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Alexei A. Erchak Art Unit: 2811
Serial No.: 10/735,498 Examiner: Unknown

Filed: December 12, 2003

Title : LIGHT EMITTING SYSTEMS

## Mail Stop Amendment

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT

Applicants submit the references listed on the attached form PTO-1449. Applicants also bring to the Examiner's attention the below listed 14 pending U.S. utility patent applications that are owned by the Assignee of the above-noted patent application.

WLL	
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?	Document Number	Patentee	Filing Date
	10/724,004	Alexei A. Erchak et al	11/26/03
	10/723,987	Alexei A. Erchak	11/26/03
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	10/724,006	Alexei A. Erchak	11/26/03
	10/724,029	Alexei A. Erchak	11/26/03
	10/724,015	Alexei A. Erchak	11/26/03
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	10/896,606	Alexei A. Erchak et al.	7/22/04
	10/871,877	Alexei A. Erchak et al	6/18/04
	10/872,336	Alexei A. Erchak et al.	6/18/04
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## CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P<sub>1</sub>O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit

Signature

Irja Zarembok

Typed or Printed Name of Person Signing Certificate

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office		Application No. 10/735,498
Information Dis-	closure Statement	Applicant Alexei A. Erchak	
(Use several si	heets if necessary) (17 1 8 2004	Fling Date December 12, 2003	Group Art Unit 2811
(37 CFR §1.98(b))		SPECCHIOCI 12, 2003	2011

Examiner Initial	Desig.	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
USL	AA	5,359,345	10/25/94	Hunter et al.			
	AB	5,631,190	05/20/97	Negley et al.			
	AC	5,724,062	03/03/98	Hunter et al.			
	AD	5,799,924	07/14/98	Krames et al.			
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	AF	6,071,795	06/06/00	Cheung et al.			
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	AI	6,410,942	06/25/02	Thibeault et al.			
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	AK	2003/0141507	07/31/03	Krames et al.			-
	AL	5,633,527	05/27/1997	Lear			02/06/95
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	AO	5,426,657	06/20/1995	Vakhsoori			05/27/94
	AP	6,091,085	07/18/00	Lester			02/19/98
	AQ	6,469,324	10/22/02	Wang, Tien Yang			
	AR	6,287,882	09/11/01	Chang et al.			
$-\Lambda$	AS	5,793,062	08/11/98	Kish et al.			

	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Trans Yes	lation No
WSZ	AT	WO 98/14986	04/09/98	PCT				

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
USL	AU	W.S. Wong et al. "Damage-free separation of GaN thin films from sapphire substrates", Appl. Phys. Lett. 72 (5), February 2, 1998, pages 599-601

Examiner Signature	Date Considered
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EXAMINER: Initials citation considered. Draw line through citation if no	t in conformance and not considered. Include copy of this form with
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	Substitute Disclosure Form (PTO-1449)

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademan Office		Application No. 10/735,498	
	plicant	Applicant Alexei A. Erchak		
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	Other Documents (include Author, Title, Date, and Place of Publication)			
Examiner	Desig.	·		
Initial	ID	Document		
WSU	AV	M.K. Kelly et al. "Optical process for liftoff of Group III-nitride films", Physica Status Solidi; Rapid Research Note, November 28, 1996, 2 pages.		
	AW	A. A. Erchak et al. "Enhanced coupling to vertical radiation using a two-dimensional photonic crystal in a semiconductor light-emitting diode", Appl. Phys. Lett. (78 (5), January 29, 2001, pages 563-565		
	AX	P.L. Gourley et al. "Optical properties of two-dimensional photonic lattices fabricated as honeycomb nanostructures in compound semiconductors", Appl. Phys. Lett. 64(6), February 7, 1994, pages 687-689		
	AY	P.L. Gourley et al. "Optical Bloch waves in a semiconductor photonic lattice", Appl. Phys. Lett. 60 (22), June 1, 1992, pages 2714-2716		
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	AAA	M. Krames et al "Introduction to the Issue on High-Efficiency Light-Emitting Diodes", IEEE Journal on selected topic in quantum electronics, Vol. 8, No. 2 March/April 2002, pages 185-188		
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